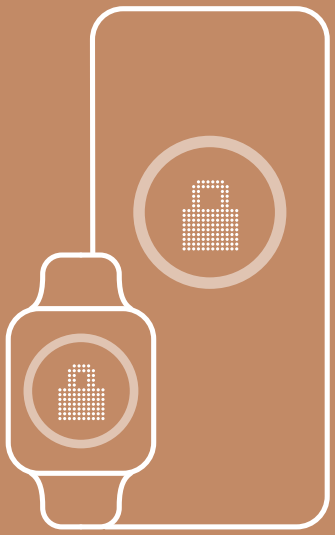
Rider manual

VanMoof S3&X3

VANMOOF

Original instruction



Your VanMoof is packed full of features. Make the most out of them by downloading the app.

Download on the App Store

GET IT ON Google Play

VANMOOF

S3 & X3

Rider manual

Please read the manual before riding the bike.

VanMoof B.V.
Mauritskade 55 1092AD Amsterdam

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1

Build your VanMoof

We know you can't wait to get riding – this won't take long, promise.

The toolbox
VanMoof S3 & X3
Take your bike out of the box
Get your toolbox ready
Adjust the stem
Wheel position
Brake disc covers
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Wheel alignment
Connect the motor cable
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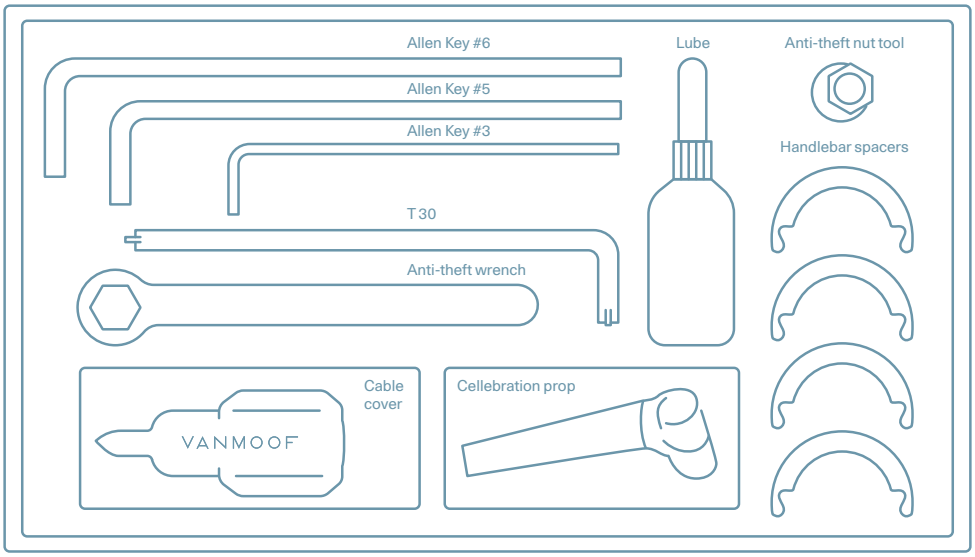
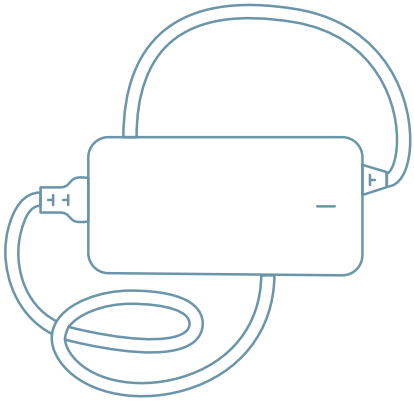
The toolbox

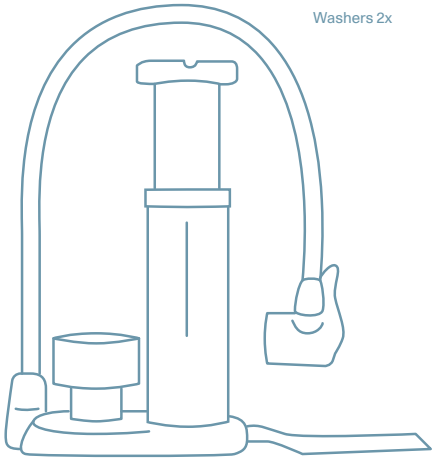


Anti-theft nuts 2x

Washers 2x



Charger



Tire pump

VanMoof X3

VanMoof S3

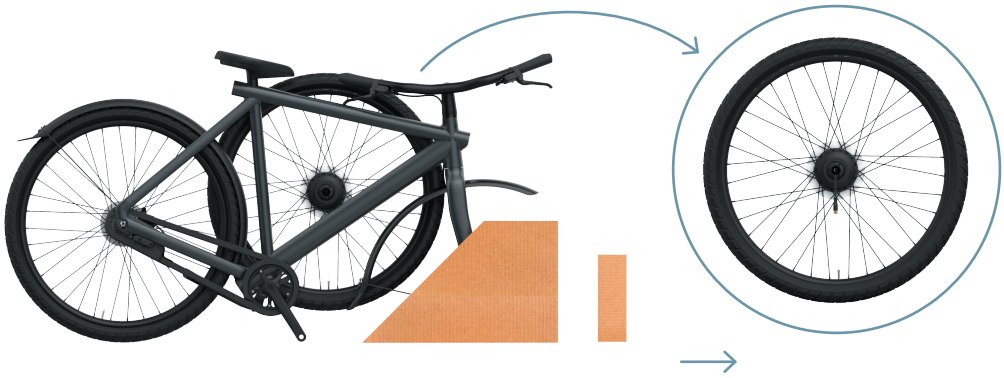
1. Take your bike out of the box

1.1 To take the bike out of the box, gently pull the yellow strap.

2. Get your toolbox ready

2.1 Take the toolbox out of the triangular front wheel stand – you'll find it at the front side of the stand. Make sure you detach the wheel from the bike's frame.

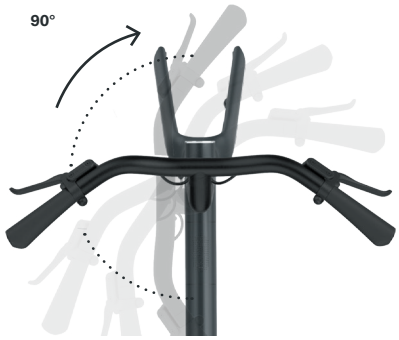
2.2 Remove (and recycle) all protective packaging. Squeeze the tab on the cable ties to remove them without cutting – you can reuse them later.



Front wheel stand **Toolbox**

3. Adjust the stem

3.1 Rotate the stem 90° clockwise so it's in line with the front fender.



Note
See page 28 to learn how to adjust the handlebar.

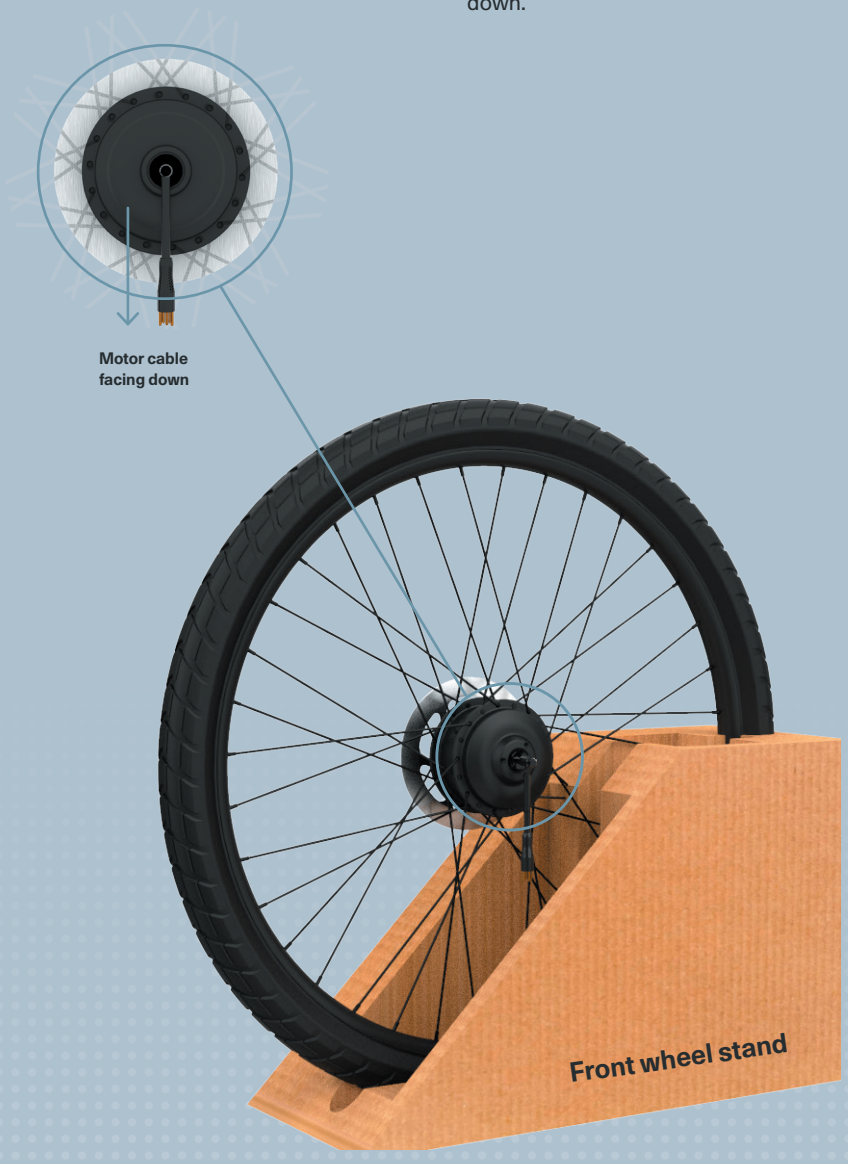
3.2 Check the bolts' position – the top should enter from the left, and the bottom from the right. Tighten the two bolts using Allen key #5, making sure the stem stays in line with the front wheel. Do not over-tighten the bolts, just turn until they are secure.

4. Wheel position

4.1 Take the bike out of the front wheel stand and place it on the floor.

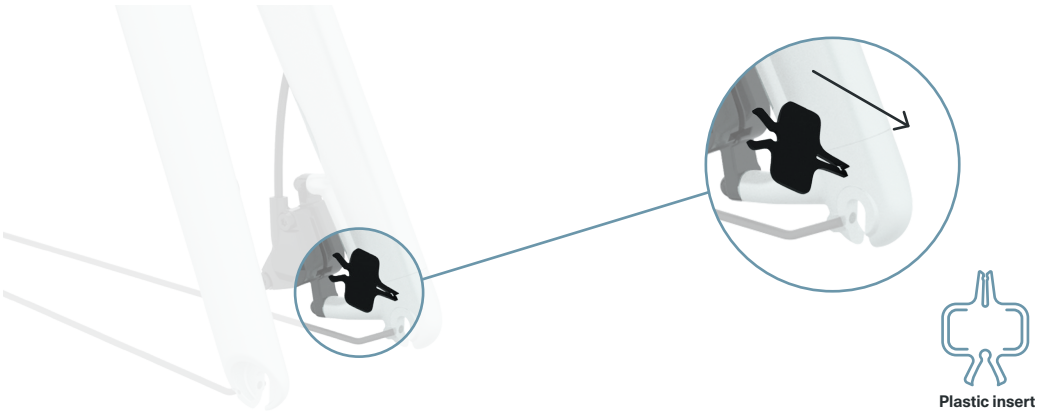
4.2 Put the front wheel in the front wheel stand.

4.3 Looking down from a riding position, the motor cable attached to the wheel should be on the right side and facing down.



5. Brake disc cover

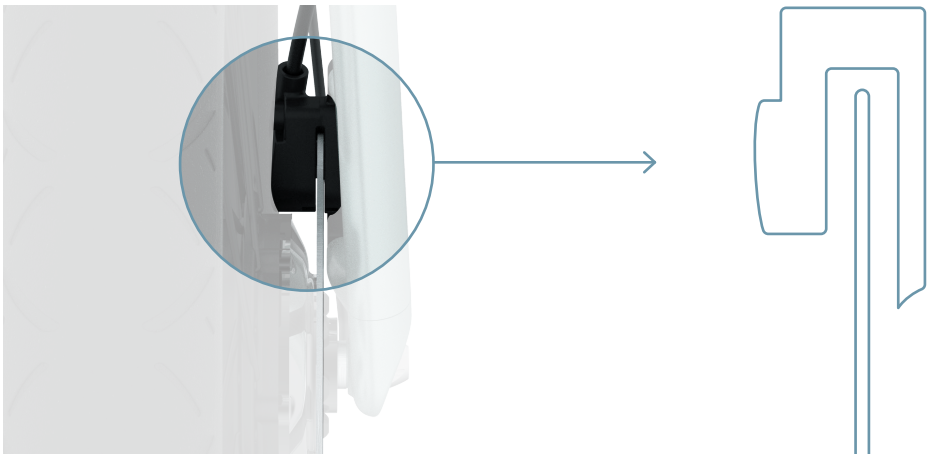
5.1 Remove the plastic insert from the brake calliper. **MAKE SURE YOU DON'T SQUEEZE THE BRAKE LEVERS** while doing this.



5.2 Carefully lift up the bike and guide the front fork onto the wheel.

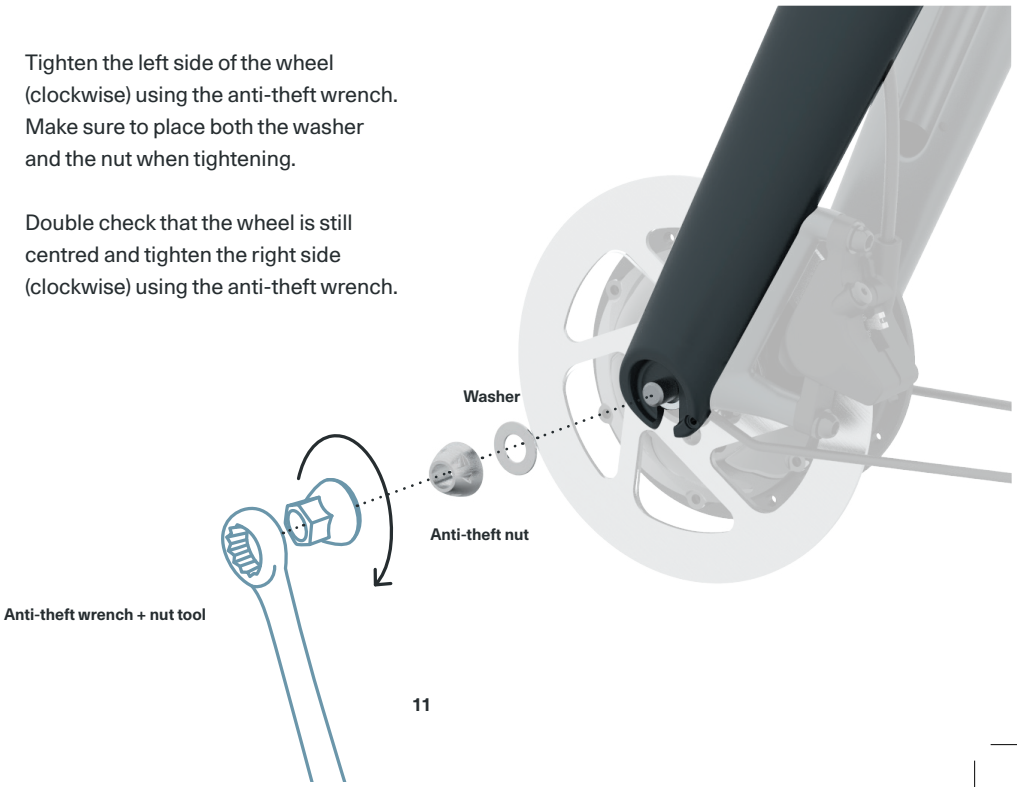
6. Brake disc alignment

6.1 The brake disc should be aligned with the brake calliper pads, with room for the wheel to spin freely.



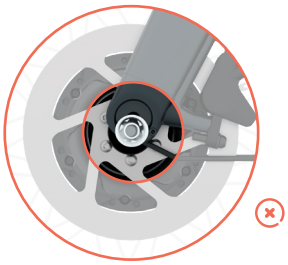
6.2 Tighten the left side of the wheel (clockwise) using the anti-theft wrench. Make sure to place both the washer and the nut when tightening.

6.3 Double check that the wheel is still centred and tighten the right side (clockwise) using the anti-theft wrench.

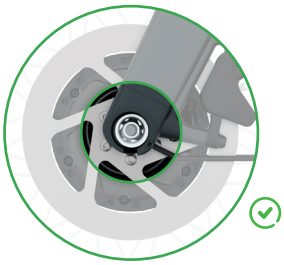


7. Wheel alignment

7.1 Check both sides of the front fork dropout to see if the installation is correct, the anti-theft nut should sit in the centre of the dropout.



Installation incorrect

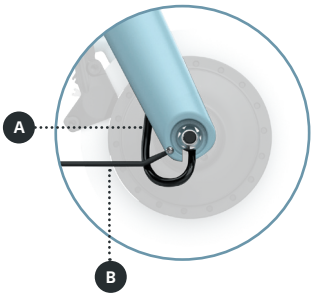


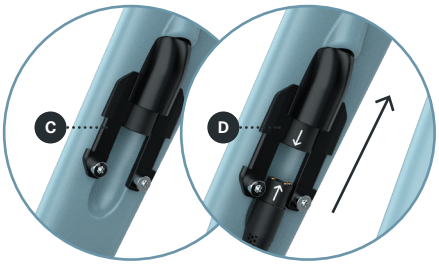
Installation correct

8. Connect the motor cable

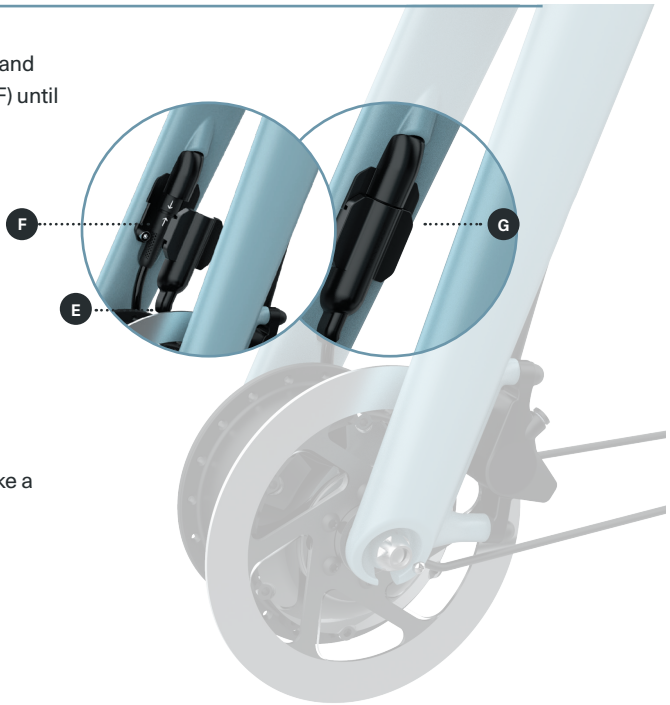
8.1 Make sure that the motor cable (A) runs between the motor and fender stay (B). Double check that the motor cable is not rubbing on the motor or wheel.

8.2 Identify the motor cable opening (C). To connect the motor cable both arrows on the connectors should be aligned (D).

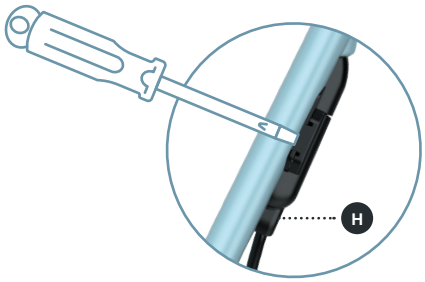




8.3 Take the motor cable cover (E) and press it over the cable holder (F) until you hear a snap (G).



Congratulations!
That was the hardest part – take a moment to celebrate.



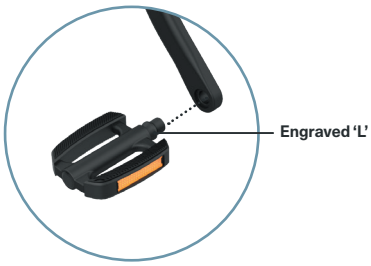
8.4 To remove the motor cable cover (H), insert a flat screw driver in the opening between the cover and the frame, and apply force away from the bike frame until it opens. Be gentle so that you don't accidentally damage the paint.

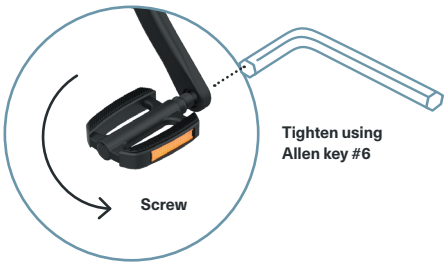
9. Attach the pedals

9.1 Identify the left pedal – if you stand behind the bike, it's attached to the left side (and has an engraved 'L').

9.2 Screw onto the left crank by hand in an anticlockwise direction.

9.3 Tighten the pedal using Allen key #6.

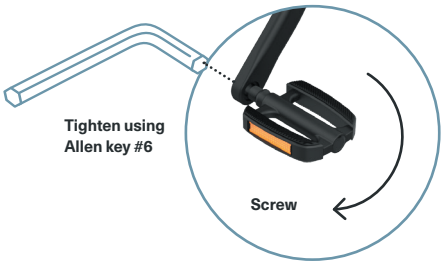




9.4 Identify the right pedal – if you stand behind the bike, it's attached to the right side of the bike (and has an engraved 'R').

9.5 Screw onto the right crank by hand in a clockwise direction.

9.6 Tighten the pedal using Allen key #6.



10. Check your handlebar

10.1 Hold the front wheel between your knees and try to rotate the handlebar. If you can feel any movement, use Allen key #5 to secure the handlebar. Check the bolts' position – the top should enter from the left, and the bottom from the right.

The first ride

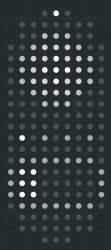
Ready for take off? Here's how to get the most from your new VanMoof.

Matrix Display
Inflate your tires
Activating your bike
Handlebar buttons
Locking your bike
Unlocking when connected
Unlocking when not connected
Enabling Apple Find My
Power assist level
Controlling the lights
Power and reset
Charging

Matrix Display

When charging, a lightning bolt will appear on the Matrix Display.

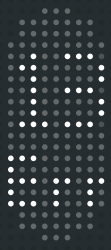
While riding, you'll see your speed, gear, and current battery level.



When stationary, you'll see the standby icon – time to get moving!

When changing settings, the Matrix Display will show what you're currently adjusting.

The alarm will be activated if anyone tampers with your bike.



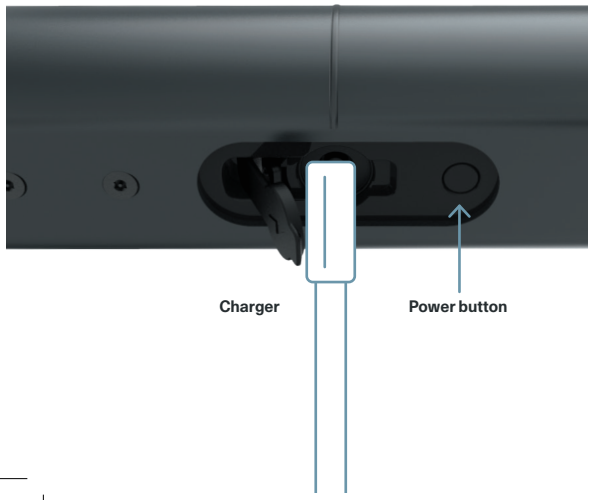
If something goes wrong, an error message will appear.

1. Inflate your tires

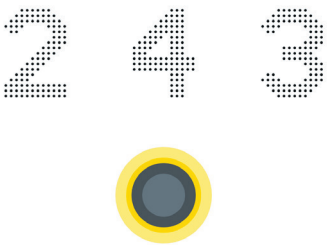
1.1 Using the included pump, inflate your tires to 3.0- 3. 5 Bar / 50 Psi (the recommended pressure is printed on the tires, if you need a reminder. The maximum tire pressure is 4.5 Bar / 65 Psi).

2. Activating your bike

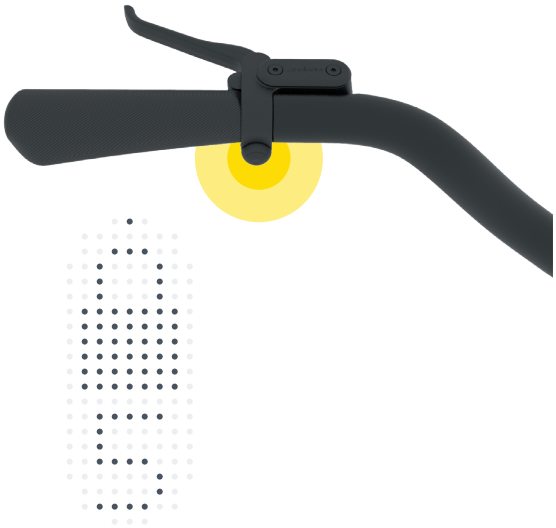
2.1 Before you ride your VanMoof, you'll have to get it out of shipping mode. To do this, insert the charging plug or press the on/off button (see page 24 for charging information).



2.2 Open the VanMoof App to create an account and register your bike (if you haven't already). The app will connect automatically, and guide you through setting your personal unlock code (see page 20) If connection fails, check if your phone is near the bike and Bluetooth is enabled.



3. The left handlebar button



3.1 **When riding**, this button will sound the bell.

3.2 **When the app isn't connected** and your bike is locked, a long press will prompt you to enter your unlock code.

3.3 **When the app is connected** and your bike is locked, a short press will unlock it – make sure Touch Unlock is enabled in the app.

3.4 **When standing still** and your bike is unlocked, it will enter standby mode after five minutes – press this button to wake up your bike.

4. The right handlebar button

4.1 **When riding,** this button activates the Turbo Boost. The Turbo Boost increases the pedal assist power for as long as you hold the button, helping you to accelerate quickly.

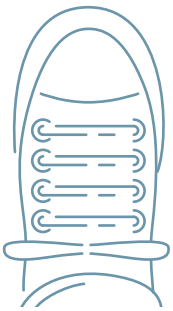
4.2 **When standing still,** press and hold this button to cycle through power assist levels.

5. Locking your bike

5.1 To lock your bike, align the stripe on the chain guard with a stripe on the rear hub.

5.2 Gently kick the Kick Lock button near the left rear dropout. You'll hear a locking sound, and the rear wheel will be immobilized.

5.3 If the alarm is activated in the app, locking your bike will automatically arm the alarm. Unlock your bike to disarm the alarm.

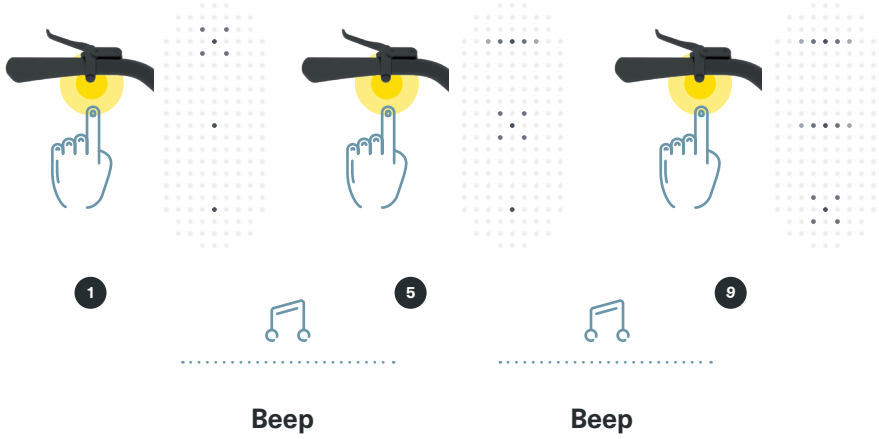


6. Unlocking when connected

6.1 When your phone is connected to your bike, press the unlock icon in the app to unlock the bike. A five-second timer will appear on the Matrix Display, and you'll hear a ticking sound – move bike forwards or backward to release the wheel.

6.2 If Touch Unlock is activated in the app, just press the left handlebar button to unlock the bike. A five-second timer will appear on the Matrix Display, and you'll hear a ticking sound – move your bike forwards or backward to release the wheel.

7. Using your unlock code



7.1 Let's say your code is 1-5-9. Here's what to do:

A. Hold the left handlebar button – this will switch to the backup unlock mode.

B. Enter the first digit of your code – in the example above that means pushing the button 1 time. You'll hear a beep as confirmation.

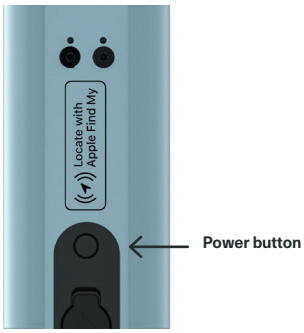
C. Enter the second digit of your code – pushing the button another 5 times. You'll hear a beep again.

D. Enter the third digit of your code – pushing the button 9 times. You'll hear a final beep.

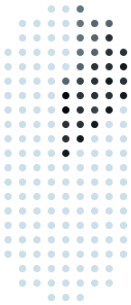
E. After the last confirmation, move your bike forwards or backwards within 5 seconds – now you're ready to ride.

8. Enabling Apple Find My

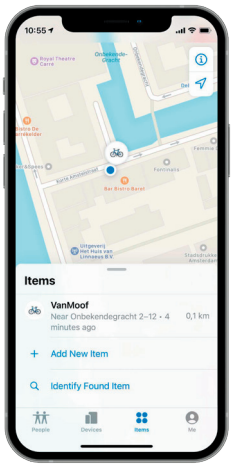
8.1 Make sure your bike is unlocked and running the latest firmware. Then double press the power button.



8.2 You'll hear a twinkling sound, and you'll see a scanning animation on your bike's Matrix Display. This means your bike is ready to pair.



8.3 Using the Apple Find My app, add your VanMoof to the Find My network.



8.4 Any time you want to enable or disable Find My, first make sure the bike is unlocked and then double press the power button. To completly disable Apple Find My press the power button 5 times in a row or remove it from your items on the Find My app.

9. Motor assistance level

9.1 When your bike isn't moving, press and hold the right handlebar button to cycle through the motor assistance levels. Release the button to select the level.

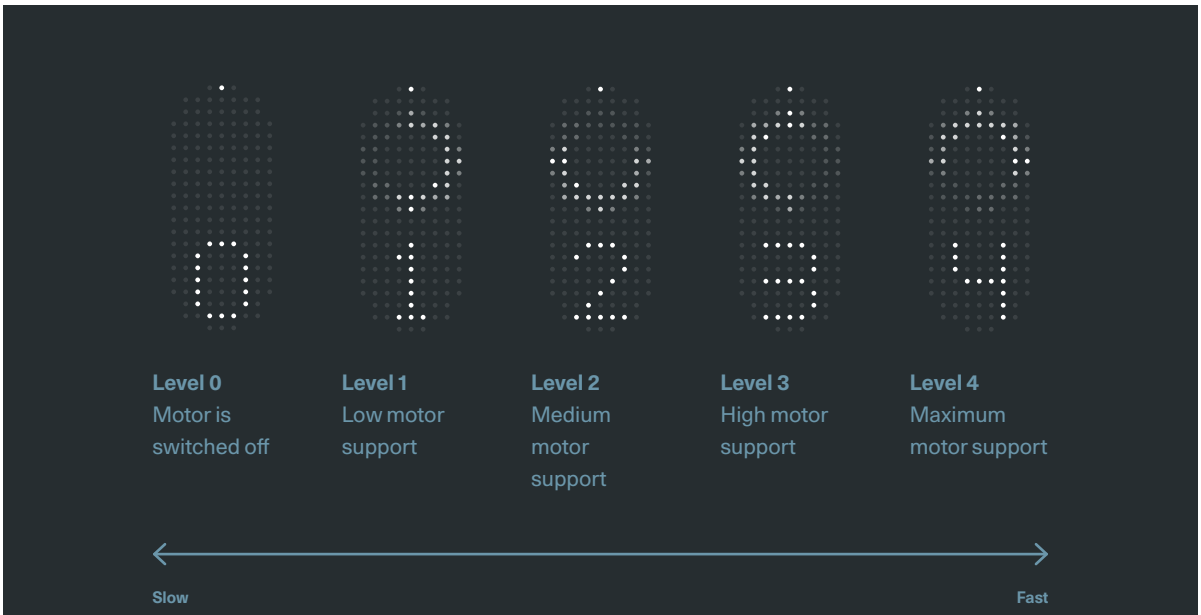
9.2 You can also change the motor assistance level in the VanMoof App when your phone is connected to your bike.

9.3 The motor will deliver power intelligently depending on your current speed.

9.4 The motor will only engage while the pedals are turning. Stop pedalling to slow down.

9.5 Your maximum speed depends on local regulations

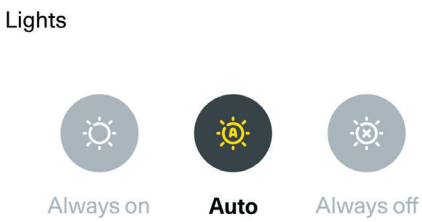
Note
Your choice of motor assistance level will affect the maximum distance you can ride. A lower level will provide less support, but allow you to ride further. Higher levels will provide more support, but you'll need to charge your bike sooner.



10. Controlling the lights

10.1 Open the VanMoof app to control the front and rear lights.

10.2 We recommend the Auto setting – your VanMoof will automatically activate the lights when it gets dark.

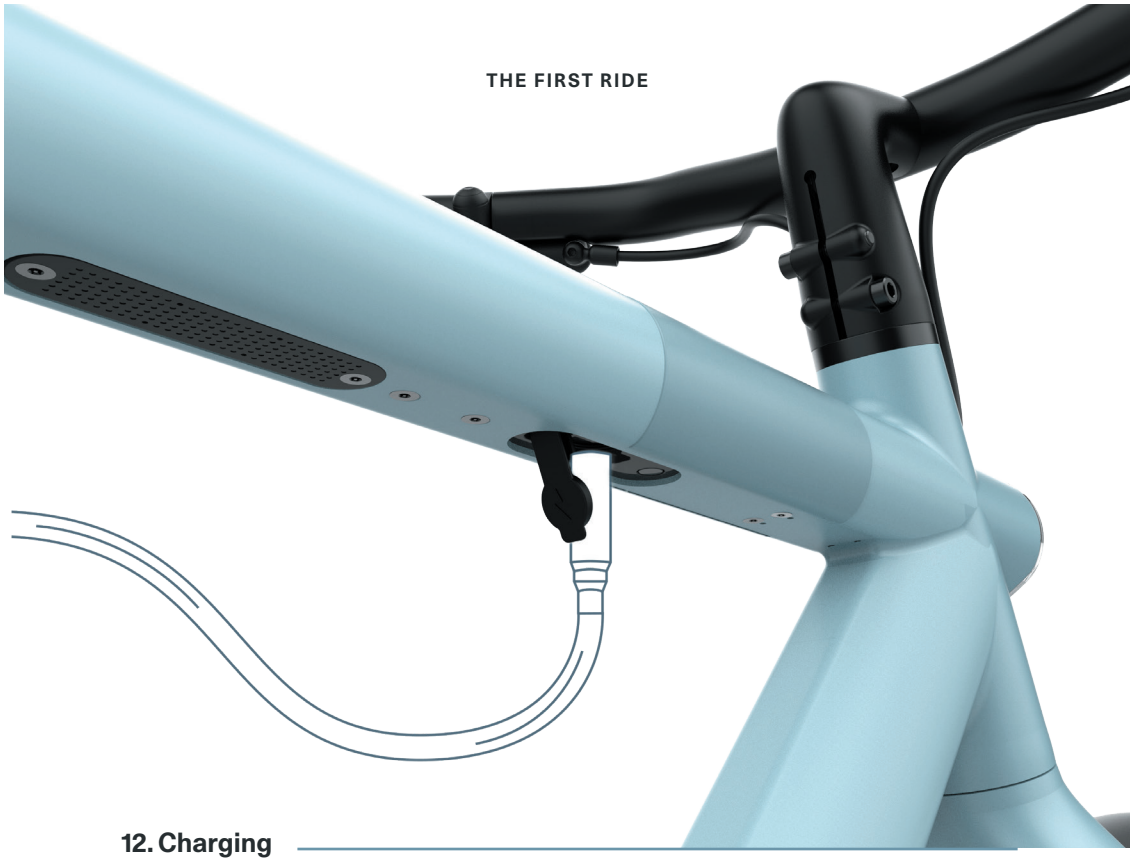


11. Power and reset

11.1 **To power your VanMoof on and off** (when unlocked), press either one of the handlebar buttons or the power on/off button.

11.2 **To reset your bike,** press and hold the power button (located on the underside of the top tube next to the charging port) for two seconds until you see the reset symbol on the Matrix Display. You'll hear your bike resetting. Press either handlebar button to power the bike on and use as normal.

Note
Most technical issues can be solved by a quick reset. If you have a problem with your bike, press and hold the power button for two seconds.



12. Charging

12.1 Open the rubber cover and gently insert the charging plug in the charging port. When fully charged, the LED on the charger will change from red to green. It takes about five hours to fully charge the battery.

Follow these simple tips to keep your battery running in perfect condition for longer:

A. Only use the official VanMoof battery charger.

B. Charge you bike indoors, in a well-ventilated dry location (moisture and extreme temperature fluctuations can affect the charging process).

C. Your bike will charge best at temperatures between 0 - 30°C (32 - 86°F) .

D. Place the charger on a hard surface and make sure it is never covered. Never place it on carpet or textile surfaces as the charger may get hot in use (up to 40-50°C).

E. Always keep the plug and connector free of dirt and moisture.

F. Do not charge your bike if the charger or plug is damaged. If in doubt, contact us immediately.

G. If you don't plan to use your bike for a long period of time, make sure the battery gets a full charge cycle every six months.

H. Unplug your charger when your bike is fully charged.

I. The battery will not deliver power when the internal temperature falls below -10 °C.

Find your fit

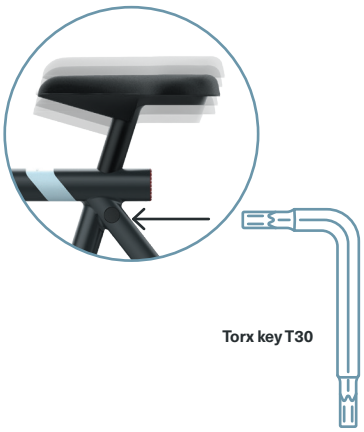
Comfort is king – here's how to tweak your bike for the perfect ride.

Saddle adjustment

Adjusting the handlebar height

1. Saddle adjustment

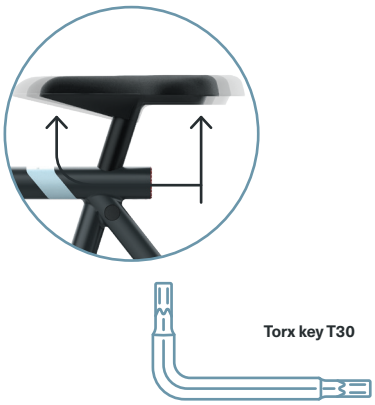
1.1 First remove the rubber cap using anti-theft Torx key T30. On the bottom left, the cap has a small flat area to make it easier to remove.



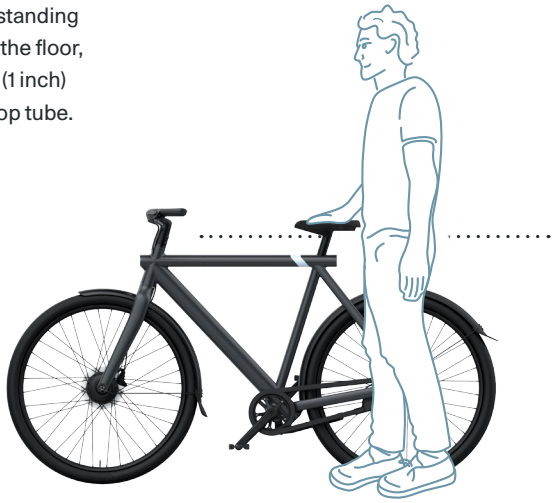
1.2 Select the right saddle height and tighten using anti-theft Torx key T30 and turning it clockwise. Make sure you don't exceed the maximum saddle height indicated by a line of stripes.

1.3 Place the rubber cap back on making sure the flat edge matches the shape of the opening.

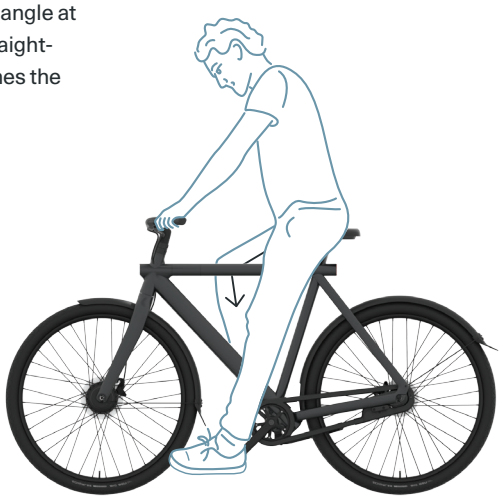
1.4 Change the saddle position by inserting anti-theft Torx key T30 into the two openings. Loosen both bolts, and then slide the seat to your preferred position.



1.5 When properly adjusted, the saddle should be at hip height. While standing over the bike with your feet on the floor, there should be at least 2.5cm (1 inch) between your crotch and the top tube.

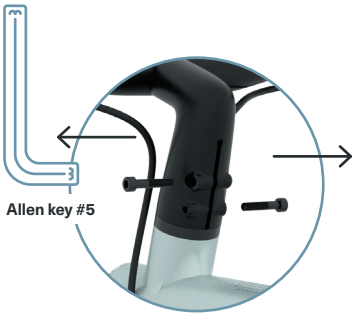


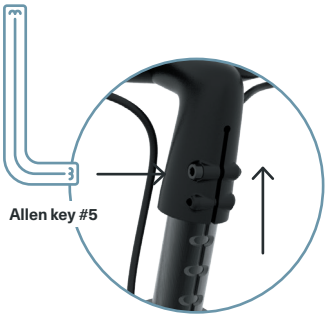
1.6 Check if your knee forms a 90° angle at the top of the pedal motion, straightening out when your foot reaches the bottom.



2. Adjusting the handle bar height

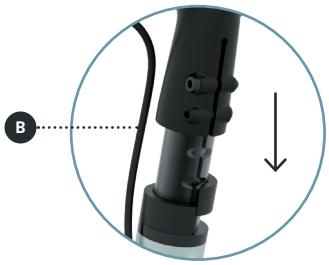
2.1 Loosen the bolts on the side of the handlebar using the Allen key #5.



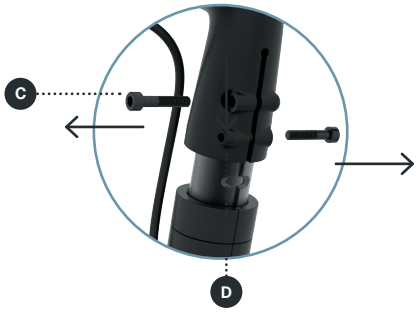


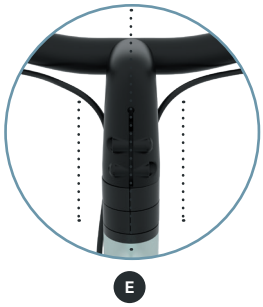
2.2 Lift it up to the top of the internal stem, then tighten one of the bolts to keep it in position. Be careful to not detach the handlebar completely as this may damage the internal wiring.

2. 3 Place together one or two spacers to raise the handlebar to your preferred height (A). Then slide them down (B)(A). Then slide them down (B).



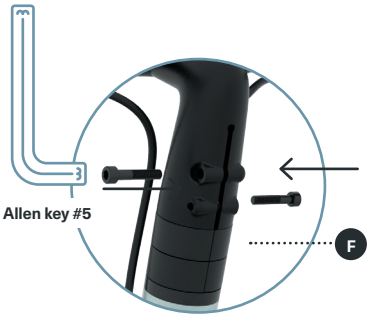
2.4 Loosen the bolt (C) and gently slide the handlebar down (D). Check the height for comfort.





2.5 Tighten the two bolts using Allen key #5, making sure the stem stays in line with the front wheel (E) and the handlebar is aligned with the notches on the internal stem. Do not over-tighten the bolts, just turn until they are secure.

Note
When insterting the bolts they need to remain on the side they were taken out from left bolt top hole, right bolt bottom hole. Make sure the handlebars are aligned with the shim if you cannot insert the bolts completely this means it is not aligned.



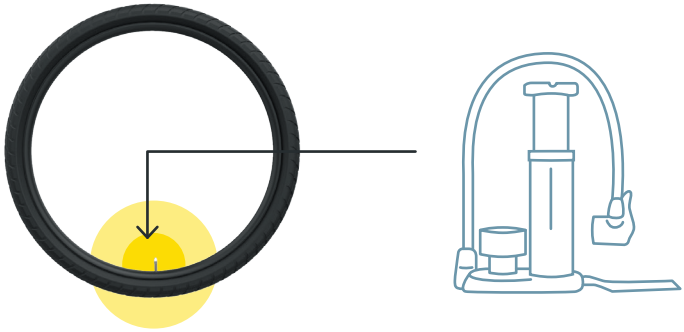
Love your VanMoof

Our bikes are built to last, but they still appreciate a little maintenance every now and then.

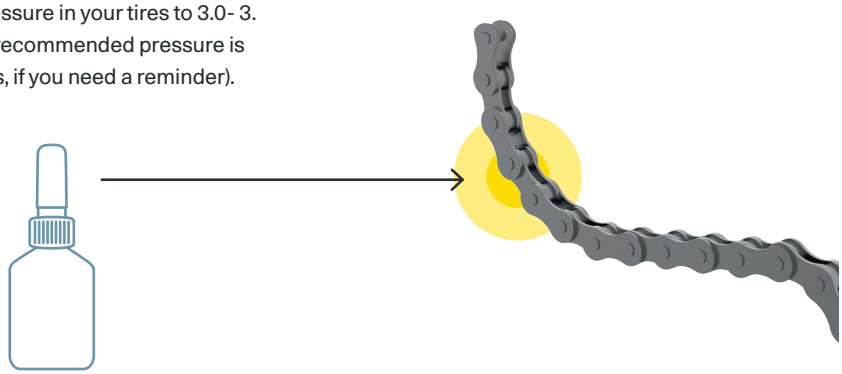
Bike basics
Chain guard and cleaning
Screw connections
Replacing parts
Apple Find My
Warranty
Warnings

Bike basics

These two simple tips will keep your VanMoof riding happier, for longer.



Pump your tires
You'll be 15% more energy-efficient by keeping the air pressure in your tires to 3.0- 3. 5 Bar / 50 Psi (the recommended pressure is printed on the tires, if you need a reminder).



Lubricate your chain
Apply a little lube to your chain every now and then to keep it running smoothly. You can do this by inserting the lube in the top or bottom hole of the chain cover, these are located near the pedals.

Chain guard and cleaning

Clean your VanMoof frame using water and gentle detergent. We do not recommend using pressure washers, as this can damage the internal electronics.

The VanMoof S3 & X3 are fitted with an enclosed chain guard to protect from dirt. If dirt gets inside, remove the chain guard and clean the chain with an oiled cloth. The integrated chain tensioner is designed to ensure the chain does need to be adjusted for the first 2 years after purchase.

For more tips on how to maintain your bike visit support.vanmoof.com

Screw connections

It's very important that all bolted connections are secured with the correct torque.

Too much torque can damage the screw, nut, or component. Always use the supplied torque spanner to tighten screw joints.

Component	Torque
Stem clamp - handlebar	7Nm
Headset stop-screw-handlebar	6Nm
Seat clamp frame screw	10Nm
Seat/saddle angle screw	10. 5Nm
Front wheel axle	30Nm
Rear wheel axle	30Nm
Motor cable cap	2Nm
Pedals	40Nm

Replacing parts

Your bike's safety certification is only valid if you use parts or replacement parts that have been approved for your model.

If parts are replaced by the user, only original parts or replacements, approved for this bicycle model by VanMoof, may be used. Otherwise the user must seek individual permission from local regulatory authorities.

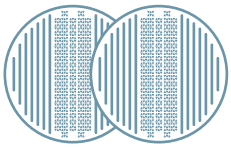
Parts which must only be replaced with approved components:

1. Frame
2. Fork
3. Motor
4. Battery
5. Electronic system
6. Tires
7. Rims
8. Brake system
9. Front light
10. Rear light
11. Kickstand
12. Handlebars
13. Seat post and saddle
14. Mudguards
15. Pedals
16. Lock
17. Grips
18. Chain guard
19. Chain

Compatible accessories

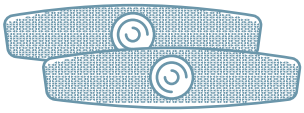
Without additional accessories, the VanMoof S3 weighs 20.8kg (46lb) and the VanMoof X3 weighs 21 kg (46.3lb.) The total weight of VanMoof S3 & X3 (including rider and luggage) should not exceed 120kg (264.5lb).

Accessories Included:



Round reflectors

Wheel reflectors



Apple Find My

VANMOOF

Works with Apple Find My

Apple Find My provides an easy, secure way to locate your VanMoof S3 or X3 on a map using the Find My app on your iPhone, iPad, iPod touch, or Mac.

To use the Find My app to locate this item you will need an iPhone or iPod touch with iOS 14.3 or later, iPad with iPadOS 14.3 or later, or a Mac with MacOS 11.1 or later.

Use of the Works with Apple badge means that a product has been designed to work specifically with the technology identified in the badge and has been certified by the product manufacturer to meet Apple Find My product specifications and requirements. Apple is not responsible for the operation of this device or use of this product or its compliance with safety and regulatory standards.

Apple, iPad, iPhone, iPod touch, and Mac are trademarks of Apple Inc., registered in the U.S. and other countries. The trademark “iPhone” is used with a license from Aiphone K.K.

Warranty

VanMoof BV guarantees each new VanMoof bicycle frame against defects in workmanship and materials for three years. All original components are guaranteed for a period of three years from the date of delivery.
This warranty is expressly limited to the replacement of a defective frame, or defective parts and is the sole remedy of the warranty. Claims under this warranty must be made directly to your point of purchase in your country. Proof of purchase is required. We advise you to keep your box, since replacement boxes are not covered by the warranty. If you need a replacement box, we'll send you one for an additional fee.

This warranty does not cover normal wear and tear, improper assembly or follow-up maintenance, or installation of parts or accessories. The warranty does not apply to damage or failure due to accident, misuse, abuse, or neglect. Modification of the frame or components shall void this warranty. VanMoof BV is not responsible for incidental or consequential damages. This warranty does not affect the statutory rights of the consumer.

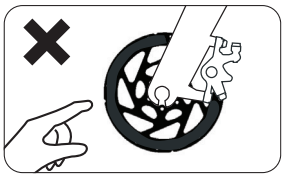
Disclaimer

Under no circumstances, including, but not limited to negligence, shall VanMoof or any VanMoof distributor (seller) be liable for any damages, including but not limited to special or consequential damages that result from the use of, or the inability to use, the VanMoof bike and/or any other products or materials referred to in this manual, even if VanMoof has been advised of the possibility of such damages.

Applicable law may not allow the limitation or exclusion of liability or incidental or consequential damages, so the above limitation or exclusion may not apply to you.

Warnings

1. WARNING Do not touch the disk of the front and rear brake while it is rotating or directly after braking. This could result in injury or burns.



2. WARNING Do not remove the battery, always contact VanMoof regarding any battery issues.

3. WARNING Always ride with care – turning and braking suddenly may cause accidents.

4. WARNING Do not modify or tamper with the bike's motor or integrated computer systems. Modifying the bike in any way will void your warranty and can lead to accidents resulting in injury or death.

5. WARNING The left brake handle controls the front wheel brake. The right brake handle controls the rear wheel brake. In the UK & Japan, the right brake handle controls the front wheel brake. The left brake handle controls the rear wheel brake.

6. WARNING Riding in the city can be hazardous. Failure to wear a helmet when riding may result in serious injury or death.

7. WARNING Never ride with headphones or talk on the phone while riding.

8. WARNING Never ride in a situation where you are not able to fully control the bike.

9. WARNING The VanMoof S3 & X3 are not suitable for towing trailers of any sort.

10. WARNING Take care when riding in wet and slippery conditions. Ride slowly and gently apply force to the brakes to accommodate a longer stopping distance.

11. WARNING Ride at an appropriate speed, in accordance with the terrain, your riding capabilities and local government regulations.

12. WARNING Disc brakes can produce significant stopping power and may behave differently to other bicycle brake systems. Please familiarize yourself with the brakes before your first ride.

13. WARNING Always make sure your lights are working properly and not covered or obscured. We recommend using lights in all conditions for maximum visibility.

14. WARNING This bike is made for riding in the city. Do not use it for racing, mountain biking or for any other form of non-urban cycling. Understand your bike and its intended use; choosing the wrong bicycle for your purpose can be hazardous. Using your bike the wrong way is dangerous.

15. WARNING Inspection and maintenance are important to the safety and longevity of your bicycle. Regularly check the brakes, tires, steering, and wheel rims. Any part of a poorly maintained bike can break or malfunction, leading to an accident resulting in serious injury or death.

16. WARNING The A-weighted emission sound pressure level at the driver ears is less than 70db(a).

17. WARNING If using a child seat with a coiled spring, make sure it is fitted correctly and the spring is covered to avoid potential injury.

18. WARNING Your bicycle must comply with your country's legal requirements when riding on public roads in all conditions, including bad weather, night time, dusk or down. Many countries require specific safety devices. It is your responsibility to familiarize yourself with the laws of the country where you ride and to comply with all the applicable laws, including properly equipping yourself and your bike as the law requires.

19. WARNING Failure to confirm compatibility, properly install, operate and maintain any component or accessory can result in serious injury or death. Do not modify your bike frame or components in any way. Modifications can cause damage leading to an accident that can result in severe injury or death. Incompatible accessories or improper mounting of accessories can adversely affect the performance of your bicycle and may be unsafe.

20. WARNING As with all mechanical components, bicycles are subject to wear and tear, as well as high stresses. Different materials and components may fatigue in different ways. Make sure you have replacement parts available for components which are easily worn or damaged, e.g. tires and brake pads. If the design life of a component has been exceeded, it can suddenly fail, possibly causing injuries to the rider. Any form of crack, scratches or change of coloring can indicate that the life span of a component has been reached and that it should be replaced.

21. WARNING Please note all product-specific demands for any third party products you add to the bike. Child and baggage carriers add weight and raise the center of gravity, affecting balance and bike handling. If you lose control, you and any child passengers can be severely injured or killed.

22. WARNING Do not fit a child seat to the VanMoof S3 or X3, unless recommended and installed by VanMoof. Doing so may result in injury or death.

23. WARNING This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1) this device may not cause harmful interference and
2)this device must accept any interference received, including interference that may cause

undesired operation of the device.

Warning Federal Communications Commission (FCC) Statement

15. 105(b)
This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

15. 21
You are cautioned that changes or modifications not expressly approved by the part responsible for compliance could void the user's authority to operate the equipment.

FCC RF Radiation Exposure Statement:

1. This Transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.
2. This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body.